

### **Abstract**

A data structure within a block of allocable memory of a memory structure such as a heap is used to identify the function that is responsible for causing memory problems such as random overwrites, buffer overruns, double or multiple “frees,” and the like. The data structure can use the return address of the function that allocates or frees the allocable memory block to identify the caller. An identifier for the function is generated and stored in the allocable memory block.